



**Micro Commercial Components** 

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### MC818B

# **PNP**

## **Plastic-Encapsulate Transistors**

**SOT-23-6L** 

G 6 5 4 B	C C C E C C C C C C C C C C C C C C C C
H H	M L

DIMENSIONS					
	INCHES		ММ		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.012	.020	0.30	0.50	
В	.059	.067	1.50	1.70	
С	.104	.116	2.65	2.95	
D	.037		0.95BSC		
G	.071	.079	1.80	2.00	
Н	.111	.119	2.82	3.02	
J	.000	.004	0.00	0.10	
K	.041	.045	1.05	1.15	
Ĺ	.012	.024	0.30	0.60	
M	.004	.008	0.10	0.20	

#### **Features**

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant (P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Tæ\å,\*Ka§18BÁ

Symbol	Parameter	Value	Unit	
$V_{CEO}$	Collector-Emitter Voltage	-30	V	
$V_{CBO}$	Collector-Base Voltage	-30	٧	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V	
I <sub>C</sub>	Collector Current Continuous	-3	Α	
T <sub>J</sub>	Junction Temperature	150	°C	
T <sub>STG</sub>	Storage Temperature Range	-55 to 150	°C	
P <sub>tot</sub>	Total Dissipation Tc=25°C	1.2	W	
$R_{\theta JA}$	Thermal Resistance, Junction-to-Ambient	357	°C/W	



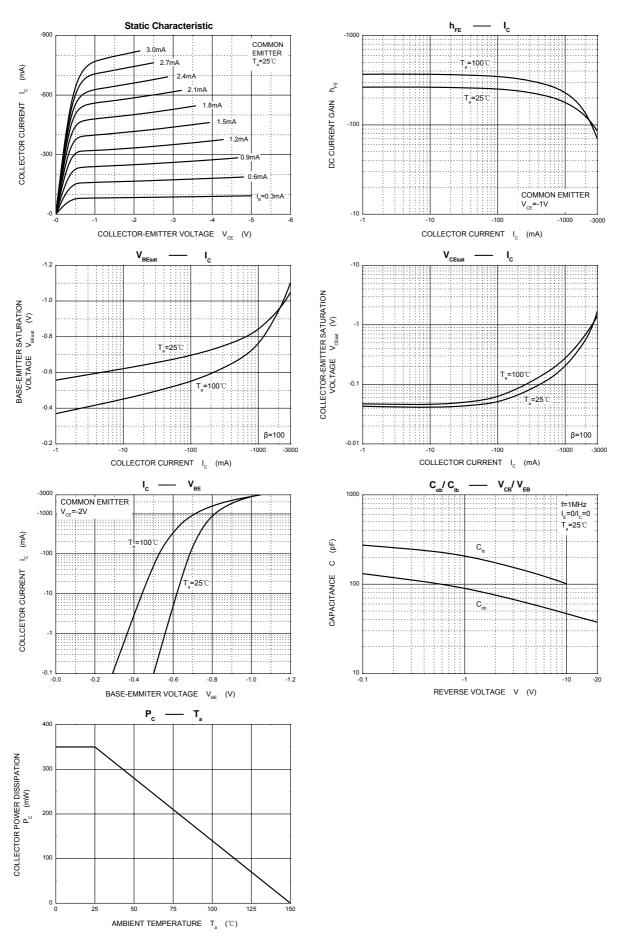
#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μA,I <sub>E</sub> =0	-30			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub> *	I <sub>C</sub> =-10mA,I <sub>B</sub> =0	-30			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100μA ,I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-30V,I <sub>E</sub> =0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V,I <sub>C</sub> =0			-0.1	μΑ
	. *	V <sub>CE</sub> =-1V, I <sub>C</sub> =-0.5A	100			
DC current gain	h <sub>FE</sub> *	V <sub>CE</sub> =-3V, I <sub>C</sub> =-2.5A	100			
		I <sub>C</sub> =-0.5A,I <sub>B</sub> =-5mA			-0.15	V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub> *	I <sub>C</sub> =-1.2A,I <sub>B</sub> =-12mA			-0.45	V
		I <sub>C</sub> =-2A,I <sub>B</sub> =-20mA			-0.8	٧
Bade-emitter saturation voltage	V <sub>BE(sat)</sub> *	I <sub>C</sub> =-0.5A,I <sub>B</sub> =-5mA			-1.1	V
		I <sub>C</sub> =-1.2A,I <sub>B</sub> =-12mA			-1.1	V
		I <sub>C</sub> =-2A,I <sub>B</sub> =-20mA			-1.2	٧
Base-emitter on voltage	V <sub>BE(on)</sub> *	I <sub>C</sub> =-0.5A, V <sub>CE</sub> =-2V			-1.1	V

<sup>\*</sup>Pulse test: Pulse width≤300us,duty cycle≤2.0%.



#### **Typical Characteristics**





#### Ordering Information:

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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